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Weisman et al. v. BJC Healthcare et al.



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REPORT ON ECONOMIC LOSS TO

Jeffery Weisman

10-3-2022

prepared by

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Case Name	Jeffery Weisman and Strategic Biomedical, Inc. v. Barnes Jewish-Hospital, BJC Healthcare, Washington University, Dr. Thomas Cox, Dr. Richard Benzinger, and Dr. Alex Evers
Case Number	4:19-cv-00075-JAR
Case Venue	Federal District Court, Eastern Missouri (St.Louis)
Trial date, approximate	1/2/2023
Case type or cause	Breach of Contract, Employment Loss
Date retained	9/9/2022
Attorney	Henry Elster
Representing	Jeffery Adam Weisman
Law Firm	Elster Law, LLC
Address	225 S. Meramec Ave., Suite 325
City, State, Zip	henry@elsterlaw.com
Loss Element	Earnings

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1. Certification

This is to certify that I have no personal relationship with the plaintiffs, defendants, or counsel involved in this matter, nor do I have a financial interest in the case at hand other than fees for professional services associated with report preparation and possible subsequent services including expert witness testimony.

I also certify that all methods, data, and statistics in this report are based on current knowledge and peer-reviewed research. The report contains explanations and supplements sufficient for any competent economist to reproduce the appraisal of economic damages. In this way I subscribe to the ethical principles of the National Association of Forensic Economics, and the American Academy of Economic and Financial Experts, organizations in which I am an active member.

A handwritten signature in black ink, appearing to read "Scott Gilbert".

Scott Gilbert, Ph.D.

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2. Purpose of Report

I was retained by plaintiff Dr. Jeffrey Weisman's attorney Henry Elster to prepare a report on economic losses to Dr. Weisman whose medical residency (or similar program) in anesthesiology (or similar field) at medical-related institutions associated with defendants ended mid-2018 such that Dr. Weisman was unable to find another anesthesiology residency¹ – allegedly due to wrongful acts or inactions by defendants, preventing him pursuing a career in the anesthesiology (or similar) field.

Economic losses identified in this report include the loss of labor earnings.²

I reserve the right to update my report to incorporate any new evidence or economic data that may become available, and/or to correct any numerical errors I may find.

3. Opinion on Economic Losses

Based on the facts and analysis in this report, and my professional training and background as a Ph.D. economist, it is my opinion that the total present value of economic losses – which here consist of labor earnings losses to Jeffrey Weisman -- is, to a reasonable degree of economic certainty and expressed in present value terms, in the following range:

	Low	High
Economic Loss:	\$7,950,055	\$9,857,789

The "Low" and "High" numbers in this range correspond to two different assumptions or models about Dr. Weisman's earnings but for the incident. Later I refer to these models as Model I and Model II, and with earnings losses being the difference between "but-for" earnings and mitigating earnings, here are the values of but-for and mitigating earnings in Models I and II, corresponding to the Low and High numbers shown above:

Earnings	Model I	Model II
Earnings But For Incident	\$12,200,494	\$14,108,228
- Mitigating Earnings	-\$4,250,438	-\$4,250,438
Economic Loss:	\$7,950,055	\$9,857,789

¹ See Dr. Weisman's Second Amended Complaint.

² I do not calculate, or express any opinion, on the loss of value of any business entity or enterprise.

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I discuss these loss values later in this report, and show in Section 11 supplementary tables with supporting calculations.

4. Background Facts and Assumptions

In preparing this report I reviewed the following discovery documents:

document

Complaint
 2020-9-25 Initial Rule 26a1 Disclosure
 table 11_rports
 ... Memorandum of Appointment
 BJH 1-138
 2021-3-31 Pltf Weisman Ans to WU Ints
 Jeffrey Weisman's Deposition Transcript (condensed)
 Jeffrey Weisman's Resignation Letter (depo trans attach A71)
 1_Earnings Record - Social Security
 2-social-security-statement
 09.09.2022-Supplemental Answers to BJH Irogs
 09.09.2022-Supplemental Answers To WU Irogs
 2020_TaxReturn
 2020-9-25 Initial Rule 26a1 Disclosure
 2021-3-31 Pltf Weisman Ans to WU Ints
 2021-3-31 Pltf Weisman Answers to BJH Ints
 Barnes Memorandum of Appointment
 BJH 1-138
 Dr. Jeffrey Weisman's deposition transcript and materials (folder)
 Exhibit A to Second Amended Complaint, Memorandum of Appointment
 Fwd_ Anesthesiologist Compensation - scott@gilberteconomics.com
 IL_TaxReturn 2020
 Second Amended Complaint
 table11_rports
 WU0001-WU2781

I also gathered and reviewed the following research documents:

document

CPI data from Federal Reserve Economic Database
 Survey of Professional Forecasters 2022 3rd Quarter
 Full Time Earnings in the U.S. 2017, excerpt
 U.S. Treasuries Quotes from Wall Street Journal Online
 Skoog Ciecka Krueger (2019) excerpt on worklife
 Anesthesiologists occupation BLS
 US Department of Veterans Affairs Doctor Salaries _ Glassdoor
 Dr. Jeffrey Weisman at VA Hospital as physician
 Dr. Jeffery A. Weisman, MD _ Chicago, IL _ Preventive Medicine Physician _ US News
 Jeffery Adam Weisman, MD, PhD, JD, MPH - SEAK, Inc_

Based on this information, I make assumptions and carry out analysis in terms described in subsequent sections of this report.

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5. Incident

Dr. Jeffrey Weisman was in an anesthesiology medical residency program³ provided or run by defendants Washington University and/or Barnes Jewish Hospital, and upon exiting that program -- before completion -- by June 2018 was reportedly unable to find another anesthesiology residency program in which to complete his residency training -- necessary to become a board-certified anesthesiologist.

6. Personal History

Jeffrey Adam Weisman was born on 12-7-1982 and was 35.56 years old on the date 7-1-2018 that marked the beginning of that time period just following his time in a medical residency program associated with Washington University and/or Barnes Jewish Hospital. He holds advanced degrees in several fields, including a Juris Doctorate (in law) from the University of Illinois Urbana Champaign, an M.D. medical degree in May 2016 or so from Louisiana State University Health Sciences School of Medicine, and a Ph.D. degree in Bioengineering and Biomedical Engineering from Louisiana Tech University. He also completed a medical residency program in occupational and environmental medicine (or a similar field) at the University of Illinois Chicago in June 2021.⁴

7. Work and Earnings History

I show in Table 1, later in this report Jeffrey Weisman's historical earnings from work, year by year, during his lifetime.⁵ He reportedly worked as a patent attorney, or in a similar position, after receiving his law degree. After entering the medical residency program at Washington University in June 2016 or so, he received a stipend of about \$53,000, and Table 1 is consistent with income at that level during 2016 (half year), 2017, and 2018 (half year). On 7-5-2022 or so he began work as a physician at the Hampton Veterans Association Medical Center, in Hampton Virginia, as a Primary Care physician and/or a Physician in Occupational Medicine, at an annual pay level of \$237,000.⁶

8. Earnings But For the Incident

I assume that Dr. Weisman would, but for his exit from the Washington University medical residency program, continued for two more years in the program -- earning a stipend in later years that matches his pre-incident stipend with adjustment for inflation⁷, after which we would complete the program (by June 2020) and begin work as a board-certified anesthesiologist with residency training in Washington

³³³ This residency reportedly involved some research in addition to regular activity as an anesthesiologist resident.

⁴ See page 33 of the following discovery document: 2021-3-31 Pltf Weisman Ans to WU Ints.

⁵ The source for these reported earnings is his Earnings Record provided by the U.S. Social Security Administration, a copy of which I include with my report.

⁶ See plaintiff's Supplemental Answers to Washington University Interrogatories.

⁷ For inflation rate data, see the following source file (included with my report) for historical rates: CPI data from Federal Reserve Economic Database. Also, for future inflation rates (forecasts), see the included document: Survey of Professional Forecasters 2022 3rd Quarter.

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University's residency program – which involved a research component. I assume that he would earn an income commensurate with that job opportunity, through his worklife expectancy at age 67.4 on 4-22-2050.⁸ To estimate or approximate that income, I assume that his pay corresponds to a that of male Physician or Surgeon with a Professional or Doctoral Degree, and use Table 1073 of the publication Full Time Earnings 2017⁹, at the 75th percentile of earnings or 90th percentile of earnings, both of which seem reasonable based on information I have reviewed.¹⁰ To apply these age-earnings profiles, I use quadratic age-earnings curves with parameter values shown in Table 2 (last 2 rows), and inflation rates shown in Table 3. Presenting the results in Tables 4 and 5, I show in Tables 6 and 7 the resulting but-for earnings – together with their present values.¹¹

9. Mitigating Earnings

I assume that Dr. Weisman's post-incident historical earnings represent his mitigating earnings opportunity, through and including his new job at a VA hospital – for which I assume that his age-earnings profile will have a real earnings growth rate matching that of the mean earner – row 2 in Table 2.¹² I show the result in Table 9, analogous to Tables 7 and 8.

10. Earnings Loss

Based on the foregoing, Tables 10 and 11 show economic losses and their present value.

⁸ This worklife expectancy matches the "Mean" worklife expectancy statistic for men active in the labor force who hold a professional or doctoral degree, see Table 10 of the Skoog, Ciecka and Krueger (2019), an excerpt of which I include with my report.

⁹ I include a relevant excerpt with my report.

¹⁰ I have reviewed a document table 11_rports, reportedly provided by Dr. Alan Kaye of Louisiana State University, with salaries for Anesthesiologists in a medical school setting, and a recent email from Dr. Alan Kaye indicating that he found annual earnings of \$500,000 - \$700,000 to be reasonable for a board certified anesthesiologist, depending on the depends on geography, academic setting, private setting, the particular facility, etc.

¹¹ I assume that future values, for present value calculations, occur in years 2023 and beyond, and bring future earnings to present value using U.S. Treasury yields as shown in Tables 6 and 7 and included in the file: U.S. Treasuries Quotes from Wall Street Journal Online. For more on discount rates, see the Technical Appendix to this report.

¹² I use his actual contracted pay VA pay rate, for projecting future mitigating earnings, adjusting for real wage growth and future inflation.

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**11. Number Tables and Charts****Table 1: Jeffrey Weisman's Historical Earnings from Work**

Year	Age	Earnings
2000	17	\$3,656
2001	18	\$5,096
2002	19	\$2,917
2003	20	\$1,237
2004	21	\$0
2005	22	\$7,800
2006	23	\$0
2007	24	\$0
2008	25	\$16,666
2009	26	\$36,666
2010	27	\$5,833
2011	28	\$7,350
2012	29	\$0
2013	30	\$0
2014	31	\$0
2015	32	\$0
2016	33	\$28,015
2017	34	\$53,078
2018	35	\$28,446
2019	36	\$28,111
2020	37	\$63,064
2021	38	\$43,924

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**Table 2: Age-Earnings Profiles, Parameter Values**

earnings statistic	alpha	beta	gamma
median	-1,528,096	74,360.76	-722.741
mean	-1,104,810	57,315.42	-563.131
75th	-1,304,501.00	69,947.76	-688.49
90th	-397,542	35,713.10	-349.684

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**Table 3: Historical and Forecasted Inflation Rates and Multipliers, Years 2018 to 2051**

Year	Inflation Rate	Inflation Multiplier
2018	2.44%	1.024
2019	1.81%	1.043
2020	1.25%	1.056
2021	4.69%	1.105
2022	7.50%	1.188
2023	3.20%	1.226
2024	2.50%	1.257
2025	2.15%	1.284
2026	2.15%	1.312
2027	2.10%	1.339
2028	2.10%	1.367
2029	2.10%	1.396
2030	2.10%	1.425
2031	2.10%	1.455
2032	2.10%	1.486
2033	2.10%	1.517
2034	2.10%	1.549
2035	2.10%	1.581
2036	2.10%	1.615
2037	2.10%	1.649
2038	2.10%	1.683
2039	2.10%	1.719
2040	2.10%	1.755
2041	2.10%	1.791
2042	2.10%	1.829
2043	2.10%	1.867
2044	2.10%	1.907
2045	2.10%	1.947
2046	2.10%	1.988
2047	2.10%	2.029
2048	2.10%	2.072
2049	2.10%	2.116
2050	2.10%	2.160
2051	2.10%	2.205

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**Table 4: Statistical Wage, Model I, Years 2018 to 2051**

Year	Age	75th Percentile		
		Real Wage	Inflation Multiplier	Nominal Wage
2018	36	\$312,331	1.024	\$319,948
2019	37	\$332,618	1.043	\$346,901
2020	38	\$351,528	1.056	\$371,200
2021	39	\$369,061	1.105	\$407,974
2022	40	\$385,218	1.188	\$457,771
2023	41	\$399,997	1.226	\$490,544
2024	42	\$413,399	1.257	\$519,655
2025	43	\$425,424	1.284	\$546,269
2026	44	\$436,073	1.312	\$571,980
2027	45	\$445,344	1.339	\$596,408
2028	46	\$453,238	1.367	\$619,727
2029	47	\$459,756	1.396	\$641,840
2030	48	\$464,896	1.425	\$662,645
2031	49	\$468,659	1.455	\$682,037
2032	50	\$471,046	1.486	\$699,906
2033	51	\$472,055	1.517	\$716,135
2034	52	\$471,688	1.549	\$730,605
2035	53	\$469,943	1.581	\$743,189
2036	54	\$466,822	1.615	\$753,755
2037	55	\$462,323	1.649	\$762,168
2038	56	\$456,447	1.683	\$768,284
2039	57	\$449,195	1.719	\$771,954
2040	58	\$440,565	1.755	\$773,024
2041	59	\$430,559	1.791	\$771,331
2042	60	\$419,175	1.829	\$766,708
2043	61	\$406,415	1.867	\$758,978
2044	62	\$392,278	1.907	\$747,961
2045	63	\$376,763	1.947	\$733,465
2046	64	\$359,872	1.988	\$715,294
2047	65	\$341,603	2.029	\$693,242
2048	66	\$321,958	2.072	\$667,095
2049	67	\$300,935	2.116	\$636,631
2050	68	\$278,536	2.160	\$601,619
2051	69	\$254,760	2.205	\$561,819

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**Table 5: Statistical Wage, Model II, Years 2018 to 2051**

Year	Age	90th Percentile	Inflation Multiplier	Nominal Wage
		Real Wage		
2018	36	\$430,286	1.024	\$440,780
2019	37	\$440,777	1.043	\$459,704
2020	38	\$450,568	1.056	\$475,783
2021	39	\$459,660	1.105	\$508,125
2022	40	\$468,053	1.188	\$556,207
2023	41	\$475,746	1.226	\$583,440
2024	42	\$482,740	1.257	\$606,818
2025	43	\$489,034	1.284	\$627,947
2026	44	\$494,629	1.312	\$648,786
2027	45	\$499,525	1.339	\$668,967
2028	46	\$503,721	1.367	\$688,753
2029	47	\$507,218	1.396	\$708,099
2030	48	\$510,016	1.425	\$726,957
2031	49	\$512,114	1.455	\$745,276
2032	50	\$513,513	1.486	\$763,005
2033	51	\$514,212	1.517	\$780,090
2034	52	\$514,212	1.549	\$796,472
2035	53	\$513,513	1.581	\$812,092
2036	54	\$512,114	1.615	\$826,887
2037	55	\$510,016	1.649	\$840,793
2038	56	\$507,219	1.683	\$853,741
2039	57	\$503,722	1.719	\$865,661
2040	58	\$499,526	1.755	\$876,477
2041	59	\$494,630	1.791	\$886,113
2042	60	\$489,036	1.829	\$894,488
2043	61	\$482,741	1.867	\$901,518
2044	62	\$475,748	1.907	\$907,115
2045	63	\$468,055	1.947	\$911,188
2046	64	\$459,663	1.988	\$913,642
2047	65	\$450,571	2.029	\$914,378
2048	66	\$440,780	2.072	\$913,293
2049	67	\$430,289	2.116	\$910,280
2050	68	\$419,100	2.160	\$905,226
2051	69	\$407,210	2.205	\$898,017

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**Table 6: Jeffrey Weisman's Earnings But For the Incident, Model I (75th percentile)**

Year	Age	Earnings	Discount Rate	Discount Factor	Present Value	PV Running Total
2018	36	\$27,186		1	\$27,186	\$27,186
2019	37	\$55,357		1	\$55,357	\$82,543
2020	38	\$213,624		1	\$213,624	\$296,168
2021	39	\$407,974		1	\$407,974	\$704,141
2022	40	\$457,771		1	\$457,771	\$1,161,912
2023	41	\$490,544	4.035	0.961	\$471,518	\$1,633,430
2024	42	\$519,655	4.281	0.920	\$477,864	\$2,111,295
2025	43	\$546,269	4.227	0.883	\$482,465	\$2,593,759
2026	44	\$571,980	4.164	0.849	\$485,859	\$3,079,619
2027	45	\$596,408	4.083	0.819	\$488,253	\$3,567,871
2028	46	\$619,727	4.047	0.788	\$488,453	\$4,056,324
2029	47	\$641,840	3.992	0.760	\$488,008	\$4,544,332
2030	48	\$662,645	3.916	0.735	\$487,328	\$5,031,661
2031	49	\$682,037	3.822	0.714	\$486,635	\$5,518,296
2032	50	\$699,906	3.816	0.688	\$481,279	\$5,999,575
2033	51	\$716,135	3.790	0.664	\$475,634	\$6,475,209
2034	52	\$730,605	3.765	0.642	\$468,918	\$6,944,127
2035	53	\$743,189	3.739	0.621	\$461,175	\$7,405,302
2036	54	\$753,755	3.713	0.600	\$452,445	\$7,857,747
2037	55	\$762,168	3.789	0.572	\$436,296	\$8,294,043
2038	56	\$768,284	3.828	0.548	\$421,202	\$8,715,244
2039	57	\$771,954	3.899	0.522	\$402,901	\$9,118,145
2040	58	\$773,024	3.956	0.497	\$384,504	\$9,502,649
2041	59	\$771,331	3.996	0.475	\$366,374	\$9,869,023
2042	60	\$766,708	4.084	0.449	\$344,311	\$10,213,334
2043	61	\$758,978	4.140	0.427	\$323,788	\$10,537,122
2044	62	\$747,961	4.124	0.411	\$307,440	\$10,844,562
2045	63	\$733,465	4.119	0.395	\$289,861	\$11,134,423
2046	64	\$715,294	4.097	0.381	\$272,877	\$11,407,300
2047	65	\$693,242	4.037	0.372	\$257,744	\$11,665,044
2048	66	\$667,095	3.957	0.365	\$243,215	\$11,908,259
2049	67	\$636,631	3.871	0.359	\$228,318	\$12,136,578
2050	68	\$183,825	3.845	0.348	\$63,916	\$12,200,494

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**Table 7: Jeffrey Weisman's Earnings But For the Incident, Model II (90th percentile)**

Year	Age	Earnings	Discount		Present Value	PV
			Rate	Factor		Running Total
2018	36	\$27,186		1	\$27,186	\$27,186
2019	37	\$55,357		1	\$55,357	\$82,543
2020	38	\$265,915		1	\$265,915	\$348,459
2021	39	\$508,125		1	\$508,125	\$856,583
2022	40	\$556,207		1	\$556,207	\$1,412,791
2023	41	\$583,440	4.035	0.961	\$560,812	\$1,973,602
2024	42	\$606,818	4.281	0.920	\$558,018	\$2,531,620
2025	43	\$627,947	4.227	0.883	\$554,603	\$3,086,223
2026	44	\$648,786	4.164	0.849	\$551,101	\$3,637,324
2027	45	\$668,967	4.083	0.819	\$547,653	\$4,184,977
2028	46	\$688,753	4.047	0.788	\$542,858	\$4,727,835
2029	47	\$708,099	3.992	0.760	\$538,387	\$5,266,222
2030	48	\$726,957	3.916	0.735	\$534,625	\$5,800,847
2031	49	\$745,276	3.822	0.714	\$531,756	\$6,332,603
2032	50	\$763,005	3.816	0.688	\$524,668	\$6,857,271
2033	51	\$780,090	3.790	0.664	\$518,110	\$7,375,382
2034	52	\$796,472	3.765	0.642	\$511,193	\$7,886,575
2035	53	\$812,092	3.739	0.621	\$503,932	\$8,390,507
2036	54	\$826,887	3.713	0.600	\$496,343	\$8,886,849
2037	55	\$840,793	3.789	0.572	\$481,304	\$9,368,153
2038	56	\$853,741	3.828	0.548	\$468,052	\$9,836,206
2039	57	\$865,661	3.899	0.522	\$451,809	\$10,288,014
2040	58	\$876,477	3.956	0.497	\$435,962	\$10,723,976
2041	59	\$886,113	3.996	0.475	\$420,894	\$11,144,870
2042	60	\$894,488	4.084	0.449	\$401,694	\$11,546,564
2043	61	\$901,518	4.140	0.427	\$384,596	\$11,931,161
2044	62	\$907,115	4.124	0.411	\$372,858	\$12,304,019
2045	63	\$911,188	4.119	0.395	\$360,096	\$12,664,115
2046	64	\$913,642	4.097	0.381	\$348,545	\$13,012,660
2047	65	\$914,378	4.037	0.372	\$339,962	\$13,352,622
2048	66	\$913,293	3.957	0.365	\$332,976	\$13,685,598
2049	67	\$910,280	3.871	0.359	\$326,459	\$14,012,057
2050	68	\$276,593	3.845	0.348	\$96,171	\$14,108,228

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**Table 8: Statistical Wage, Mitigating Situation, Years 2018 to 2051**

Year	Age	Statistical Mean, Real Wage	Real Wage, Growth Rate	Inflation Rate
2018	36	\$221,320		
2019	37	\$238,017	7.5%	1.8%
2020	38	\$253,588	6.5%	1.2%
2021	39	\$268,033	5.7%	4.7%
2022	40	\$281,351	5.0%	7.5%
2023	41	\$293,543	4.3%	3.2%
2024	42	\$304,609	3.8%	2.5%
2025	43	\$314,549	3.3%	2.2%
2026	44	\$323,362	2.8%	2.2%
2027	45	\$331,049	2.4%	2.1%
2028	46	\$337,610	2.0%	2.1%
2029	47	\$343,044	1.6%	2.1%
2030	48	\$347,353	1.3%	2.1%
2031	49	\$350,535	0.9%	2.1%
2032	50	\$352,590	0.6%	2.1%
2033	51	\$353,520	0.3%	2.1%
2034	52	\$353,323	-0.1%	2.1%
2035	53	\$352,000	-0.4%	2.1%
2036	54	\$349,551	-0.7%	2.1%
2037	55	\$345,975	-1.0%	2.1%
2038	56	\$341,273	-1.4%	2.1%
2039	57	\$335,445	-1.7%	2.1%
2040	58	\$328,491	-2.1%	2.1%
2041	59	\$320,410	-2.5%	2.1%
2042	60	\$311,203	-2.9%	2.1%
2043	61	\$300,870	-3.3%	2.1%
2044	62	\$289,411	-3.8%	2.1%
2045	63	\$276,825	-4.3%	2.1%
2046	64	\$263,113	-5.0%	2.1%
2047	65	\$248,275	-5.6%	2.1%
2048	66	\$232,311	-6.4%	2.1%
2049	67	\$215,220	-7.4%	2.1%
2050	68	\$197,003	-8.5%	2.1%

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**Table 9: Jeffrey Weisman's Mitigating Earnings**

Year	Age	Real Wage, Growth Rate	Inflation Rate	Earnings	Discount Rate	Discount Factor	Present Value	PV Running Total
2018	36			\$0		1	\$0	\$0
2019	37			\$28,111		1	\$28,111	\$28,111
2020	38			\$63,064		1	\$63,064	\$91,175
2021	39			\$43,924		1	\$43,924	\$135,099
2022	40			\$116,148		1	\$116,148	\$251,247
2023	41	4.33%	3.20%	\$255,183	4.04	0.961	\$245,286	\$496,532
2024	42	3.77%	2.50%	\$252,083	4.28	0.920	\$231,810	\$728,343
2025	43	3.26%	2.15%	\$249,995	4.23	0.883	\$220,796	\$949,138
2026	44	2.80%	2.15%	\$248,879	4.16	0.849	\$211,406	\$1,160,544
2027	45	2.38%	2.10%	\$247,729	4.08	0.819	\$202,805	\$1,363,349
2028	46	1.98%	2.10%	\$246,773	4.05	0.788	\$194,500	\$1,557,849
2029	47	1.61%	2.10%	\$245,872	3.99	0.760	\$186,943	\$1,744,793
2030	48	1.26%	2.10%	\$245,016	3.92	0.735	\$180,192	\$1,924,984
2031	49	0.92%	2.10%	\$244,194	3.82	0.714	\$174,233	\$2,099,217
2032	50	0.59%	2.10%	\$243,396	3.82	0.688	\$167,367	\$2,266,584
2033	51	0.26%	2.10%	\$242,615	3.79	0.664	\$161,137	\$2,427,721
2034	52	-0.06%	2.10%	\$241,842	3.76	0.642	\$155,220	\$2,582,941
2035	53	-0.37%	2.10%	\$241,071	3.74	0.621	\$149,593	\$2,732,534
2036	54	-0.70%	2.10%	\$240,293	3.71	0.600	\$144,237	\$2,876,771
2037	55	-1.02%	2.10%	\$239,502	3.79	0.572	\$137,100	\$3,013,872
2038	56	-1.36%	2.10%	\$238,689	3.83	0.548	\$130,858	\$3,144,730
2039	57	-1.71%	2.10%	\$237,845	3.90	0.522	\$124,137	\$3,268,866
2040	58	-2.07%	2.10%	\$236,960	3.96	0.497	\$117,865	\$3,386,731
2041	59	-2.46%	2.10%	\$236,025	4.00	0.475	\$112,109	\$3,498,840
2042	60	-2.87%	2.10%	\$235,024	4.08	0.449	\$105,544	\$3,604,384
2043	61	-3.32%	2.10%	\$233,942	4.14	0.427	\$99,802	\$3,704,186
2044	62	-3.81%	2.10%	\$232,761	4.12	0.411	\$95,673	\$3,799,859
2045	63	-4.35%	2.10%	\$231,454	4.12	0.395	\$91,469	\$3,891,329
2046	64	-4.95%	2.10%	\$229,991	4.10	0.381	\$87,739	\$3,979,068
2047	65	-5.64%	2.10%	\$228,331	4.04	0.372	\$84,892	\$4,063,960
2048	66	-6.43%	2.10%	\$226,418	3.96	0.365	\$82,549	\$4,146,509
2049	67	-7.36%	2.10%	\$224,175	3.87	0.359	\$80,397	\$4,226,907
2050	68	-8.46%	2.10%	\$67,678	3.85	0.348	\$23,532	\$4,250,438

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**Table 10: Jeffrey Weisman's Economic Loss, Model I**

		Earnings	Discount	Discount	Present	PV
Year	Age	Loss	Rate	Factor	Value	Running Total
2018	36	\$27,186		1	\$27,186	\$27,186
2019	37	\$27,246		1	\$27,246	\$54,432
2020	38	\$150,560		1	\$150,560	\$204,993
2021	39	\$364,050		1	\$364,050	\$569,042
2022	40	\$341,623		1	\$341,623	\$910,665
2023	41	\$235,361	4.035	0.961	\$226,233	\$1,136,898
2024	42	\$267,572	4.281	0.920	\$246,054	\$1,382,952
2025	43	\$296,273	4.227	0.883	\$261,669	\$1,644,621
2026	44	\$323,102	4.164	0.849	\$274,453	\$1,919,074
2027	45	\$348,679	4.083	0.819	\$285,448	\$2,204,522
2028	46	\$372,954	4.047	0.788	\$293,953	\$2,498,475
2029	47	\$395,967	3.992	0.760	\$301,065	\$2,799,540
2030	48	\$417,629	3.916	0.735	\$307,136	\$3,106,676
2031	49	\$437,844	3.822	0.714	\$312,403	\$3,419,079
2032	50	\$456,510	3.816	0.688	\$313,912	\$3,732,991
2033	51	\$473,521	3.790	0.664	\$314,497	\$4,047,488
2034	52	\$488,763	3.765	0.642	\$313,698	\$4,361,186
2035	53	\$502,118	3.739	0.621	\$311,582	\$4,672,768
2036	54	\$513,462	3.713	0.600	\$308,208	\$4,980,976
2037	55	\$522,666	3.789	0.572	\$299,195	\$5,280,171
2038	56	\$529,595	3.828	0.548	\$290,344	\$5,570,515
2039	57	\$534,110	3.899	0.522	\$278,764	\$5,849,279
2040	58	\$536,063	3.956	0.497	\$266,639	\$6,115,918
2041	59	\$535,307	3.996	0.475	\$254,265	\$6,370,183
2042	60	\$531,684	4.084	0.449	\$238,767	\$6,608,950
2043	61	\$525,036	4.140	0.427	\$223,986	\$6,832,936
2044	62	\$515,200	4.124	0.411	\$211,767	\$7,044,702
2045	63	\$502,011	4.119	0.395	\$198,392	\$7,243,094
2046	64	\$485,303	4.097	0.381	\$185,138	\$7,428,232
2047	65	\$464,911	4.037	0.372	\$172,852	\$7,601,084
2048	66	\$440,677	3.957	0.365	\$160,666	\$7,761,750
2049	67	\$412,456	3.871	0.359	\$147,921	\$7,909,671
2050	68	\$116,147	3.845	0.348	\$40,384	\$7,950,055

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**Table 11: Jeffrey Weisman's Economic Loss, Model II**

Year	Age	Earnings Loss	Discount Rate	Discount Factor	Present Value	PV Running Total
2018	36	\$27,186		1	\$27,186	\$27,186
2019	37	\$27,246		1	\$27,246	\$54,432
2020	38	\$202,851		1	\$202,851	\$257,284
2021	39	\$464,201		1	\$464,201	\$721,484
2022	40	\$440,059		1	\$440,059	\$1,161,544
2023	41	\$328,258	4.035	0.961	\$315,526	\$1,477,070
2024	42	\$354,735	4.281	0.920	\$326,207	\$1,803,277
2025	43	\$377,952	4.227	0.883	\$333,807	\$2,137,084
2026	44	\$399,908	4.164	0.849	\$339,695	\$2,476,779
2027	45	\$421,238	4.083	0.819	\$344,849	\$2,821,628
2028	46	\$441,981	4.047	0.788	\$348,358	\$3,169,986
2029	47	\$462,227	3.992	0.760	\$351,444	\$3,521,429
2030	48	\$481,941	3.916	0.735	\$354,433	\$3,875,862
2031	49	\$501,082	3.822	0.714	\$357,524	\$4,233,386
2032	50	\$519,609	3.816	0.688	\$357,301	\$4,590,687
2033	51	\$537,475	3.790	0.664	\$356,973	\$4,947,660
2034	52	\$554,629	3.765	0.642	\$355,973	\$5,303,634
2035	53	\$571,021	3.739	0.621	\$354,339	\$5,657,972
2036	54	\$586,594	3.713	0.600	\$352,106	\$6,010,078
2037	55	\$601,291	3.789	0.572	\$344,203	\$6,354,281
2038	56	\$615,053	3.828	0.548	\$337,195	\$6,691,476
2039	57	\$627,816	3.899	0.522	\$327,672	\$7,019,148
2040	58	\$639,517	3.956	0.497	\$318,097	\$7,337,245
2041	59	\$650,088	3.996	0.475	\$308,785	\$7,646,030
2042	60	\$659,464	4.084	0.449	\$296,150	\$7,942,180
2043	61	\$667,575	4.140	0.427	\$284,794	\$8,226,975
2044	62	\$674,354	4.124	0.411	\$277,185	\$8,504,159
2045	63	\$679,734	4.119	0.395	\$268,627	\$8,772,786
2046	64	\$683,651	4.097	0.381	\$260,806	\$9,033,592
2047	65	\$686,047	4.037	0.372	\$255,070	\$9,288,661
2048	66	\$686,875	3.957	0.365	\$250,427	\$9,539,088
2049	67	\$686,104	3.871	0.359	\$246,062	\$9,785,150
2050	68	\$208,915	3.845	0.348	\$72,639	\$9,857,789

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12. CV – Included with Report

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13. Ethics Statements

National Association of Forensic Economics (NAFE)

Statement of Ethical Principles and Principles of Professional Practice

Forensic economics is the scientific discipline that applies economic theories and methods to matters within a legal framework. Forensic economics covers, but is not limited to:

the calculation of pecuniary damages in personal and commercial litigation;

the analysis of liability, such as the statistical analysis of discrimination, the analysis of market power in antitrust disputes, and fraud detection; and,

other matters subject to legal review, such as public policy analysis, and business, property, and asset valuation.

When providing expert opinion, a NAFE member pledges, as a condition of membership, adherence to the following:

1. Engagement

Practitioners of forensic economics should decline involvement in any litigation when asked to assume invalid representations of fact or alter methodologies without foundation or compelling analytical reason. Practitioners of forensic economics should work with a client to avoid any existing or potential conflicts of interest.

2. Compensation

Practitioners of forensic economics should not accept contingency fee arrangements, or fee amounts associated with the size of a court award or out-of-court settlement.

3. Diligence

Practitioners of forensic economics should employ generally accepted and/or theoretically sound economic methodologies based on reliable economic data. Practitioners of forensic economics should attempt to provide accurate, fair and reasonable expert opinions, recognizing that it is not the responsibility of the practitioner to verify the accuracy or completeness of the case-specific information that has been provided.

4. Disclosure

Practitioners of forensic economics should provide sufficient detail to allow replication of all numerical calculations, with reasonable effort, by other competent forensic economics experts, and be prepared to provide sufficient disclosure of sources of information and assumptions underpinning their opinions.

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5. Consistency

While it is recognized that practitioners of forensic economics may be given a different assignment when engaged on behalf of the plaintiff than when engaged on behalf of the defense, for any given assignment, the basic assumptions, sources, and methods should not change regardless of the party who engages the expert to perform the assignment. There should be no change in methodology for purposes of favoring any party's claim. This requirement of consistency is not meant to preclude methodological changes as new knowledge evolves, nor is it meant to preclude performing requested calculations based upon a hypothetical--as long as its hypothetical nature is clearly disclosed.

6. Knowledge

Practitioners of forensic economics should strive to maintain a current knowledge base of the discipline.

7. Discourse

Practitioners of forensic economics shall preserve and protect open, uninhibited discussion in educational and professional forensic economics conferences, and list serves, by refraining from citation of remarks made in such environments, without permission from the originator.

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American Association of Economic and Financial Experts (AAEFE)

Statement of Ethical Principles

As a practicing forensic economist and a member of the American Academy of Economic and Financial Experts, I pledge to provide unbiased and accurate economic analysis for all litigation related engagements, to strive to improve the science of forensic economics, and to protect the integrity of the profession through adherence to the following tenets of ethical practice:

Employment

While all forensic economists have the discretionary right to accept retention for any case or proceeding within their expertise, they should decline involvement in any litigation when asked to take or support a predetermined position, when having ethical concerns about the nature of the requested assignment, or when compensation is contingent upon the outcome.

Honesty and Candor

Forensic economists shall be honest, thorough and open in their analyses and shall not provide the retaining or opposing attorney or the court, any information, through commission or omission that they know to be false or misleading. They shall exert due diligence, and at all times strive to use competent judgment to avoid the use of invalid or unreliable information.

Disclosure

Forensic economists shall clearly state the sources of information and material assumptions leading to their opinions. Such disclosure should be in sufficient detail to allow identification of specific sources relied upon, and replication of the analytical conclusions by a competent economist with reasonable effort.

Neutrality

Forensic economists shall at all times attempt to operate from a position of neutrality with respect to their calculations and analyses. Whether retained by the plaintiff or the defense, the approach, methodology and conclusions should be essentially the same.

Knowledge

Forensic economists shall at all times attempt to maintain a current knowledge base of the discipline and shall provide the retaining attorney with the full benefit of this knowledge regardless of how it may affect the outcome of the case.

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Responsibility

Forensic economists shall at all times strive to practice within the boundaries of professional and disciplinary honesty and fairness. To this end, they must assume the responsibility of holding their colleagues in the profession accountable to the ethical principles promulgated herein.



14. Technical Appendix

Economic loss, as quantified herein, reflects the loss of labor earnings and related losses such as the value of household services or future medical expenses, and the present value of such losses. Some readers may wish to review common economic concepts and formulas that relate to labor earnings, the growth of earnings, and the present value of earnings.¹³

Earning Capacity

In personal injury cases, an injured person may suffer a loss of ability to work, with their labor earnings capacity reduced or eliminated by injury. In such cases, a definition of earnings capacity is "the monies that a person is able to earn that results from skills and training," according to the current (10th) edition of Black's Law Dictionary, edited by Bryan Garner and published in year 2014. This Dictionary is often referenced by lawyers, and the term *earning capacity* appears with the same definition in the second edition of the Dictionary -- which was published in 1910. The term *earning capacity* also appears in the lexicon of labor economics via the first volume of the Handbook of Labor Economics, published in 1986, wherein Yoram Weiss defines it as the maximal amount of net current earnings which is attainable given a person's human capital and hours worked.¹⁴ Forensic economists Horner and Slesnick (1999) interpret earning capacity to be "the ability to earn money," and "the expected earnings of a worker who chooses to maximize the expectation of actual earnings." This meaning is consistent with the law-related definition in Black's Law Dictionary,¹⁵ and also with Weiss' (1986) economics-related definition. Recently, Horner and Slesnick (2017) revisited the theme of earning capacity, defining the term slightly differently: "the expected earnings of a worker who chooses to maximize the expected present value of actual earnings."

¹³ This material is standard fare for economists, but also technical in nature. For additional discussion, in application to forensic economics, see the article: "The Value of Future Earnings in Perfect Foresight Equilibrium," published by me (Scott Gilbert) in the *Journal of Forensic Economics* in the year 2011, and my book *Business Liability and Economic Damages*, 2nd edition (Business Expert Press, year 2020).

¹⁴ See this article listed as Weiss (1986) at the end of this paper.

¹⁵ A related definition of earning capacity is: "the ability to work in appropriate occupations, now and in the future", as in Dobbs' Law of Remedies (Damages – Remedies – Restitution) 2nd edition -- section 8.1(2). Also, from *Klingman v. Kruschke*, 339 N.W. 2d 603 (1983), page 605: "Earnings capacity involves the potential to earn, the potential that the person might attain."

Fringe Benefits from Work

People that work for an employer can receive wages or salary and, in addition, fringe benefits that include employer contributions to employee health and retirement benefit plans. For people with a documented history of work for a specific employer, information about employer contributions to benefit plans may be reflected in the employee's pay stubs, W-2 tax forms, other pay records, and the company's employee benefit policy documents. For an employee having no documented fringe benefits, if it is nevertheless reasonable to suppose that such fringe benefits were received, the extent of benefits may be estimated using a statistically representative or average amount of benefits for persons in a similar job or occupation.¹⁶

Some employers may provide no fringe benefits to their employees. Most employers are required to match employees' contributions to U.S. Medicare and Social Security programs. These contributions to the federal government are an employer cost but not a contribution to employee benefits per se.

A. Medicare

Medicare is a federal health insurance program for people age 65 or older, certain younger people with disabilities, and people with End-Stage Renal Disease.¹⁷ Medicare has two parts: Part A (Hospital Insurance) and Part B (Medicare Insurance). A person is eligible for premium-free Part A if they are age 65 or older and if they or their spouse worked and paid Medicare taxes for at least 10 years. They can get Part A at age 65 without having to pay premiums if: (a) they are receiving retirement benefits from Social Security or the Railroad Retirement Board, or (b) they are eligible to receive Social Security or Railroad benefits but you have not yet filed for them, or (c) they or their spouse had Medicare-covered government employment.¹⁸ For Medicare Part B,¹⁹ people who choose to receive it pay a premium that depends on income reported to the IRS two years before the premium is due.²⁰

The dollar value of employer contributions to Medicare does not affect a worker's future opportunities to receive Medicare. To get Medicare, a worker becomes eligible via ten years'

¹⁶ The U.S. Bureau of Labor Statistics provides such information via its monthly publication: "Employer Costs for Employee Compensation", available online at www.bls.gov. For benefits estimates matching more narrowly defined occupations see the "Employer Paid Benefits" publication from Expectancy Data.

¹⁷ See the article "What's Medicare", available online at www.medicare.gov. As of year 2020, Medicare tax is 1.45% of gross wages, with an employer match of 1.45%.

¹⁸ See the article "Who is eligible for Medicare?" available online at www.hhs.gov.

¹⁹ See the article "Part B costs, Medicare" available online at www.edit.medicare.gov.

²⁰ For example, an individual who filed a tax return in year 2018 with income of \$87,000 or less would pay \$144.60 per month in year 2020 for Medicare Part B.

worth of Medicare tax payments, or Social Security contributions. Having qualified for Medicare, the dollar value of employer contributions is irrelevant to the Medicare recipient's benefits or cost of participating in a Medicare plan. As a result, an employer's matching contribution dollars to an employee's Medicare contributions – while working – are not relevant to determining a worker's fringe benefits from work.

B. Social Security Benefits

Social Security benefits, provided by the U.S. Social Security Administration (SSA), provide financial support to many seniors and individuals with disabilities. The Social Security system differs from a personal saving retirement plan in that a worker's Social Security payments to the government are not invested for their future use, and are not necessarily invested at all. From SSA Publication No. 05-10297 (March 2017): "The money you pay in taxes is not held in a personal account for you to use when you get benefits. Today's workers help pay for current retirees' and other beneficiaries' benefits. Any unused money goes to the Social Security trust funds to help secure today and tomorrow for you and your family."²¹

Funding for U.S. Social Security benefits is via the Federal Insurance Contributions Act (FICA). The FICA employee contribution is 6.2% of gross wages, and the employer matching contribution is 6.2%.²² A person age 62 or older is eligible for Social Security benefits if they have accumulated 10 years (or 40 quarters) of work credits.²³ As such, the amount of the employer's FICA matching dollars does not affect an employee's ability to receive Social Security benefits in the future. An employee's future dollar amount of Social Security benefits depends on their lifetime FICA-taxable earnings: higher earnings from work, up to a statutory limit, result in more Social Security income. An employer's FICA matching dollars do not affect the future Social Security income that an employee may receive.

A worker's FICA contributions to the Social Security system provide a potential source of retirement income. Future retirement income provides a benefit to those workers who ultimately receive it. The overall benefits from work can be divided into three parts: (a) current wages received, (b) current non-wage benefits received, including health insurance, and (c) contributions to retirement funds. While Social Security is not a traditional retirement fund, it provides some anticipated benefit to workers that make FICA payments out of their paychecks.

In some cases it may be possible to calculate the present value of worker's future wages, benefits received in future work years, and future retirement income. For such a calculation it is important to

²¹ This article is entitled: "What is FICA?".

²² Social Security contributions are owed on that part of a worker's income that does not exceed the taxable maximum income, see the document: "Social Security Contribution and Benefit Base" available from the Social Security Administration online at www.ssa.gov. For example, in year 2021 the taxable maximum is \$142,800. The employee and employer combined contributions to Social Security (via FICA) and Medicare are 6.2+6.2+1.45+1.45 = 15.3%.

²³ See the document "Understanding SSI - Social Security Entitlement" available from the Social Security Administration online at www.ssa.gov.



first reduce the worker's wages by the dollar amount of contributions made to current non-wage benefits and future retirement, to avoid double-counting. For example, from one hundred dollars of gross wages a worker may make a \$6.20 FICA contribution, leaving the worker with a reduced or net wage of \$93.80. Having paid \$6.20 today, and maintaining FICA contributions for at least ten years, the worker can hope to receive future Social Security retirement income. In personal injury and wrongful death cases, an economist may calculate the present value of a worker's wages (net of FICA contributions) and future Social Security retirement income if enough information is available, provided that the Court permits such calculations.

The future dollar amount of a worker's Social Security benefits depends on a worker's lifetime FICA-taxable earnings, via the Average Indexed Monthly Earnings (AIME)²⁴ which is an average of 35 years of a worker's indexed or inflation-adjusted earnings, and converts each year's historical earnings – through age 59 -- into current dollars via the Average Wage Indexing (AWI) series.²⁵ For workers that have at least 10 years of FICA-taxed wages but less than 35 such years upon retirement, their AIME average earnings are based on 35 years with imputed 0 earnings in a number of years which, when combined with actual work years, total to 35.²⁶

For a person eligible for SSA retirement benefits, Let A be the value of their Average Indexed Monthly Earnings. The person's estimated SSA monthly retirement income or benefit B depends on A via a formula that depends on two parameters called "bendpoints". Denoting these bendpoints as v_1 and v_2 , the monthly benefit B is the sum of three parts: $B = B_1 + B_2 + B_3$, with each part currently defined by the SSA as follows:

$$B_1 = 0.9 \times \begin{cases} A & \text{if } A < v_1 \\ v_1 & \text{if } A \geq v_1 \end{cases}$$

$$B_2 = 0.32 \times \begin{cases} A - v_1 & \text{if } v_1 < A \leq v_2 \\ v_2 - v_1 & \text{if } A > v_2 \\ 0 & \text{otherwise} \end{cases}$$

$$B_3 = 0.15 \times \begin{cases} A - v_2 & \text{if } A > v_2 \\ 0 & \text{otherwise} \end{cases}$$

²⁴ See the article: "Social Security Benefit Amounts", available from the Social Security Administration online at www.ssa.gov.

²⁵ See the article: "Average Wage Indexing Series", available from the Social Security Administration online at www.ssa.gov.

²⁶ For example, if a person turning age 67 tomorrow is eligible to receive full-retirements Social Security benefits tomorrow and has exactly 10 years (or 40 quarters, or 120 months) of work credits then their AIME is: $(40/420)(\text{average indexed income for 40 quarters}) + (300/420)(0)$, which is $(40/420)(\text{average income for 40 quarters})$. Here the number 420 is the number of months in 35 years.

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In any given year past 1977, the first bendpoint v_1 is the inflation-adjusted value of the 1977 first bend point value of \$180, and the second bendpoint v_2 is the inflation-adjusted value of the 1977 second bend point value of \$1,085.²⁷ In year 2020 the bend points are \$996 for v_1 and \$6,002 for v_2 , and if $A = \$3,000$ then the monthly benefit is: $0.9 \times 996 + 0.32 \times (3,000 - 996) = \$1,538$.

To determine the present value of future Social Security retirement benefits, useful pre-conditions or inputs include: a forecast of a worker's future Average Indexed Monthly Earnings (A) at the retirement date, forecasts of the bendpoints v_1 and v_2 , and reasonable certainty that the worker will be permitted to receive Social Security retirement income via the current SSA formula. A person's lifetime history of SSA-taxable labor earnings may be useful for forecasting A , as may be a forecast of their future SSA-taxable earnings through age 59, and a predicted age at which they will begin receiving SSA retirement income. Forecasts of v_1 and v_2 may be informed by SSA's own forecasted growth rates in the AWI series.²⁸ The SSA Trustees' projections for Social Security finances, and that of the U.S. Congressional Budget, may be useful for determining whether a the worker will be permitted to receive Social Security retirement income via the current SSA formula.²⁹

In cases where a person's lifetime history of SSA-taxable labor earnings is unknown, it may be difficult to determine the present value of future Social Security retirement benefits. Also, for a person expected to retire and receive Social Security income in years beyond 2035, projections of an exhausted Social Security fund may cast doubt on the relevance of the current SSA formula for projecting future values of Social Security income in years beyond 2035. One more challenge, to the economist who attempts to estimate the present value of Social Security retirement income in a personal injury or wrongful death case, is that some Courts may be disinclined to hear expert witness testimony that relates to a worker's Social Security tax payments³⁰, or to tax laws or the future health of the Social Security fund.

C. Workers Compensation Insurance. This is required of some employers, but such compensation is implicitly a part of lost earnings so would be double-counted if included as a fringe benefit.

²⁷ See the document "Primary Insurance Amount" from the Social Security Administration online at www.ssa.gov. Also, see the SSA document "Average Wage Indexing (AWI) Series" on the website, for the AWI series used to adjust bendpoints. Forecasts of future AWI growth rates are available in the SSA document "Estimates Under the 2020 Trustees Report".

²⁸ See the document: "Estimates Under the 2020 Trustees Report" from the Social Security Administration online at www.ssa.gov.

²⁹ See for example the SSA Trustees' document: "Trustees Report Summary" at www.ssa.gov and the CBO's document: "The 2020 Long-Term Budget Outlook", available at www.cbo.gov. Some projections of Social Security retirement income (old-age and survivor insurance, OASI) funds project a depletion of funds by year 2035 or so.

³⁰ An economist that appraises the present value of a worker's net labor income (net of FICA contributions) and Social Security retirement income must subtract FICA tax from gross wage to get net wage or labor income.

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Life Expectancy, Healthy Life Expectancy

Life expectancy is a representative, statistically average summary of the length of an individual's life, given their current age and demographic status (such as male or female). The United States Department of Health and Human Services (DHHS) publishes life expectancy statistics in its U.S. Life Tables (see attached). These estimates are "period" estimates, based on a "snapshot" of the population during a given recent period of time.

Individuals often suffer declines in health before they die. The amount of time during which an individual can be reasonably expected to remain healthy can be quantified and called "healthy life expectancy." By its nature, healthy life expectancy (HLE) is a number that is less than or equal to (total) life expectancy (LE). The publication Healthy Life Expectancy, published by Expectancy Data, reports a representative, statistically average summary of the length of an individual's healthy life, similar in style to the DHHS' LE report. This HLE (or e_y^h) statistic is based on individuals' mortality risks, as reported in U.S. Life Tables, and self-reported statements about their health being excellent and their activities not limited by health issues. An example of such a survey is: 2014 National Health Interview Survey, Centers for Disease Control and Prevention, National Center for Health Statistics.

Worklife Expectancy

Worklife expectancy is the number of future years during which a person can be expected to work, and by comparison life expectancy is the number of years during which a person can be expected to remain alive.³¹ Since a person must be alive in order to work, worklife expectancy can be no greater than life expectancy, and the difference between the two generally depends on the nature of a person's work.³²

Denoting by $P(work_t | alive_t)$ the chance or probability that a person in future year is working, conditional on them being alive in that year, worklife expectancy takes the form:

$$E[worklife] = \sum_t P(work_t | alive_t)P(alive_t),$$

this being a sum of terms over future years t . A particular model of worklife makes use of some assumptions about the probabilities $P(work_t | alive_t)$ of working – while alive – and about the

³¹ See Gilbert, Scott (2020), Business Liability and Economic Damages, 2nd edition, page 108.

³² See for example Gilbert (2014).

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probabilities $P(\text{alive}_t)$ of remaining alive³³ in future years t . See for example Smith (1982, 1986) and Skoog Ciecka and Krueger (2019), where the conditional probability $P(\text{work}_t | \text{alive}_t)$ can be specific to individuals of a particular sex/gender, educational attainment, and/or status in the workforce – “active” or “inactive”.

Some economists working for the firm Vocational Economics Incorporated (VEI), such as David Gibson and Sarah Ford, have applied a methodology which VEI calls their Vocational Economic Rationale, when calculating worklife expectancy. With this approach, the worklife probabilities $P(\text{work}_t | \text{alive}_t)$ dependent on a person’s disability status. A limitation of this approach is that available survey data – particularly the American Community Survey (ACS) only contains responses to a quite limited set of survey questions about peoples’ disability-related experiences. As a result, reliance on ACS data for determining disability status can be challenging or impossible except in special cases, rendering invalid a generic application of the VEI methodology to earnings loss calculations in personal injury cases. For other criticisms of the VEI approach to worklife expectancy calculation, see Ireland (2009a, 2009b), Ostrofe (2014), and Ireland and Slesnick (2020).

Present Value

For economic losses occurring in the past, arising in a personal injury or wrongful death case, their contribution to economic loss or damages is straightforward to measure -- by adding up the estimated historical losses in past years. There is no need to bring past losses to present value as the relevant legal framework typically bars consideration of interest on past losses of this kind. The remainder of this section addresses the bigger challenge of estimating future losses. For additional discussion see Gilbert (2011) and Gilbert (2016).

Consider an economy in which nominally riskless claims to future consumption are bought and sold, and that such claims can be bought via government bonds. In the bond market, suppose that at date 0 there exists nominally riskless zero-coupon bonds of maturity $m = 1, 2, \dots, N$ and let $R_{0,m}$ be the bond's gross return upon maturity. At date 0 the problem is to determine the market price of a stream of non-negative expected future nominal payments $E_0[Y_1], \dots, E_0[Y_N]$, all expressed in nominal terms, with earnings Y_t arriving at date t for each $t = 1, 2, \dots, N$, and $E_0[Y_t]$ the expected earnings given information available at time 0. In the absence of arbitrage, and with rational expectations held by market participants, at time 0 the market price P_0 is:

³³ One source of such “life probabilities” is the set of U.S. Life Tables, published annually, by the U.S. Department of Health and Human Services as part of their National Vital Statistics Reports.

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$$P_0 = \sum_{t=1}^N \frac{E_0[Y_t]}{R_{0,t}}$$

In application to personal injury and wrongful death cases, the damages value P_0 represents equitable compensation for lost future earnings, and also plays a fiduciary role: receipt of P_0 dollars at time 0 guarantees the injured party the delivery of expected future earnings $E_0[Y_t], i = 1, 2, \dots, N$.

Let Y_t^* be discounted future income:

$$Y_t^* = \frac{Y_t}{R_{0,t}}$$

Then expected damages are the sum of expected discounted earnings:

$$E[P_0] = \sum_{t=1}^N E[Y_t^*]$$

With the time horizon N fixed and market data on bond yields as of time 0, the variables $R_{0,t}$ in the equation above are known,³⁴ in which case the only unknowns are the earnings forecasts $E_0[Y_t]$. Forecasting future economic outcomes, particularly at longer horizons, is a hard problem, but as a starting point we can express future earnings level Y_t in terms of base earnings Y_0 and accumulated earnings growth rates:

$$Y_t = Y_0 \prod_{s=1}^t (1 + g_s)$$

³⁴ Published bond yields $r_{0,t}$ are equal to $(R_{0,t})^{1/t} - 1$, and are usually quoted in percent form.

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with earnings growth rates w_t :

$$g_t = \frac{Y_t - Y_{t-1}}{Y_{t-1}}$$

Under the simplifying assumption that future growth rates g_t are mutually independent random variables, from the standpoint of the current time ($t = 0$), the forecast of future income in future period t is as follows:

$$E[Y_t] = Y_0 \prod_{s=1}^t (1 + E_0[g_s])$$

with $E_0[g_t]$ the forecasted rate of earnings growth.

Earnings Growth Forecasts

Forecasts $E_0[g_t]$ reflect expected labor earnings growth for an individual. In court cases in which the relevant earnings definition or standard is earning capacity, earnings growth is associated with a person's pursuit and fulfillment of earning capacity. In court cases in which the relevant earnings definition is expected earnings, earnings growth is associated with a person's reasonably expected outcomes in the labor market.

In competitive labor markets, a person's annual labor earnings, income, or wages grows from one year to the next if that person works more from one year to the next or if the person receives a higher wage per unit hour (or week, or month) from one year to the next. For a person employed full-time that provides the same quantity of labor each year, their earnings grow over time if their monthly wage rate increases from one year to the next. An increase in the competitive equilibrium wage rate, per month (or week, etc.) occurs if there is an increase in labor demand or a decrease in labor supply. In a given industry, market-wide changes in demand – by employers -- can occur, contributing to the long-term secular trend in market wage. Similarly, market-wide changes in supply – by workers – can also occur, contributing to the secular trend in market wage. The U.S. The Bureau of Labor Statistics describes such secular trends via its "Job Outlook" reports in the Occupational Outlook Handbook available online at [bls.gov](https://www.bls.gov).

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In addition to market-wide secular wage trends, a specific worker's education, skills, training, and general "human capital" generally affect the wages that the worker can command in the marketplace. Over time, increases in a worker's human capital can increase wage, and a slowing of human capital development can lead to diminished wage increases or possibly a decrease in the wage itself.

For specific individual, their reasonably expected future wage growth reflects their own path of human capital development as well as labor market trends in the industry in which they compete for jobs. A simple measure of human capital development is a person's age: as a typical person ages from their 20s to 30s, 30s to 40s, 40s to 50s, and 50s to 60s, there will tend to be an arc of human capital development from earlier years to later years. Such an arc can be seen in age-earning profiles like those provided via the Current Population Survey conducted by the U.S. Bureau of Labor Statistics. Age alone may say little about a specific person's actual education, skill, training, and general ability to command a wage in the labor market, and should not serve as the only "input" variable to be considered when forecasting a specific person's wage growth. See Heckman, Lochner and Todd (2006) for a detailed discussion of wage models that include age, education, and experience as an input.

Reasonable forecasts of wage growth should reflect individual-specific information about human capital (education, skills, training, etc.), as well as market-wide changes in labor supply and demand. For this a clear statement of the relevant labor market is useful, as is an identification of the specific individual's opportunities to command a wage in that market.

Discount Rates

The foregoing discussion provides a standard economic framework for measuring the present value of future losses, when the losses in question arise from a presumably riskless stream of labor earnings, incorporating earnings growth forecasts, brought to present value by current-day risk-free discount rates.

In application to employment loss cases, the use of risk-free or minimum-risk discount rates is supported by case law that includes the U.S. Supreme Court cases: *Chesapeake & Ohio Ry. Co. v. Kelly*, 241 U.S. 485 (1916) and *Jones & Laughlin Steel Corporation, etc., Petitioner, v. Howard E. Pfeifer*, 462 U.S. 523 (1983).

The damages value P_0 depends on anticipated future growth $E[g_t]$ in earnings and on gross returns upon maturity, $R_{0,m}$, for bonds of maturity m . For each future loss year, the corresponding maturity m is the number of elapsed years between the present date and the loss year. With multiple future years of losses, there are multiple maturities m to incorporate into the analysis. In some special circumstances, it is possible to simplify the analysis by focusing on a single maturity, via the "historical net discount rate" approach, provided that the validity of the circumstances is confirmed. The historical

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net discount rate approach, as discussed in Gilbert (2011) and references therein, relies on a special relationship between gross return $R_{0,m}$ and the product of future short-term gross returns:

$$R_{0,m} = \prod_{s=0}^{m-1} R_{s,1}$$

With this relation between a gross return at a given maturity m and future gross returns of maturity $m = 1$, the expected present value of future income arriving at time t becomes:

$$PV(Y_t) = Y_0 \prod_{s=1}^t E_0 \left[\frac{1+g_s}{1+r_s} \right]$$

With $r_t = R_{t,1} - 1$ the short-term interest rate.

Historical Net Discount Rates

The historical net discount rate methodology, sometimes called the historical rate method, involves estimating the expected value G via an historical average of ratios $(1+g_t)/(1+r_t)$. For values of g_t and r_t near zero, the ratio $(1+g_t)/(1+r_t)$ is approximately equal to $1+g_t-r_t$, and the constant G may be estimated via an average of the differences g_t-r_t , or an average of the differences with sign reversed: r_t-g_t , provided that the effect of the sign change is adjusted for. The historical net discount rate, or "NDR", is a sample average of historical "net discount rates" r_t-g_t , and provides an estimate of G of the form $1 - \text{NDR}$.

The historical rate method can simplify the appraisal of economic loss, under special circumstances. To be useful to the Trier of Fact, the relevance of those circumstances should be examined on a case-by-case basis. One special requirement of the historical rate method is that gross return $R_{0,m}$ on maturity m , for a bond that pays off after m periods, must equal the gross return on maturity that results from rolling over a sequence of short-term bonds between the starting time "0" and the future period " m ". This matching of longer-term bond performance and short-term bond performance is counter to the usual outcome in U.S. Treasury markets where longer-term bonds significantly outperform the short-term bond or bill. An estimate of the relevant performance difference, via historical data at dates $t = 1, \dots, T$, is the sample average performance difference:

$$D = \frac{1}{T} \sum_{t=1}^T \left(R_{t,m} - \prod_{s=0}^{m-1} R_{t,s,1} \right)$$



If the maturity performance difference D is small in economic terms, and is statistically insignificant at a conventional level such as 5 percent, then the assumption of no performance difference may be reasonable.

Another special requirement of the historical rate method is that the times series $r_t - g_t$ of net discount rates should have an historical sample average that reasonably approximates a long-run population mean value $E[r_t - g_t]$, and that future values of $r_t - g_t$ have the same population mean value. This requirement is met if the time series $r_t - g_t$ is independent and identically distributed over time, with finite variance. More generally, the requirement is met if the series $r_t - g_t$ is a stationary linear autoregressive ("AR") time series with finite variance. The econometrics literature provides statistical tests of stationary AR models versus non-stationary ones. One such test, the augmented Dickey Fuller ("ADF") test pits a non-stationary "unit root" model against a stationary AR model. For the time series $r_t - g_t$, if the ADF rejects a unit root at conventional significance levels, including the 5 percent level then the series $r_t - g_t$ may reasonably be considered stationary, otherwise not.

To vet the historical discount rate method, in a personal injury or wrongful death case, the practitioner should examine and report the relevance of the special circumstances required of the method, via tests of: (a) maturity performance differences, and (b) net discount rate stationarity. If tests find economically and statistically significant maturity performance differences, and/or net discount rate non-stationarity, some of the requisite special circumstances are invalid and the historical rate method should not be used without some other compelling economic argument.

Household Services

Household services include housekeeping³⁵ and other services necessary to support a household, such as home food cooking, pet care, home and vehicle maintenance, banking, and shopping.

One measure of the economic value of household services is the replacement cost of such services, equal to the cost of having someone else provide these services to an individual or family. Economic losses, associated with household services, are then equal to the sum of replacement costs for various types of household services. The ATUS (American Time Use Survey) provides a detailed account of surveyed individuals' daily activities, and provides information about activities that can be identified as household services, including cooking, inside housework, outside housework, shopping, etc. The amounts of hours devoted to household services varies by demographic group, with married individuals providing different amounts of household services than single individuals, for example. A statistical summary of household service hours, by demographic type and also type of service, is available in the publication: Dollar Value of a Day (see attached excerpt). Also provided in that publication is a replacement cost, in dollars per hour, for various types of services. These replacement costs are

³⁵ See for example Section 8.1(3) of Dobbs' Law of Remedies (Damages – Remedies – Restitution) 2nd edition.

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obtained from the Occupational and Employment Statistics (OES) survey conducted by the U.S. Department of Labor's Bureau of Labor Statistics.

In application to a personal injury case, the value of lost household services depends on the specific circumstances and lifestyle of the injured person. An interview of the person, which may be styled after the ATUS survey, is appropriate whenever possible, and should aim to identify actual time use and specific daily activities of the individual, before and after the incident in question. The results of such an interview can help determine which, if any, types of services have been lost. The actual extent of such services may then be estimated via statistical tables.

References

Cooter, Robert and Thomas Ullen (2012), *Law and Economics*, Sixth Edition, Addison-Wesley.

Gilbert, Scott (2011), "The Value of Future Income in Perfect Foresight Equilibrium," *Journal of Forensic Economics*, 21-42, 2011.

Gilbert, Scott (2014), "Worklife and Economic Damages," in *The Brief*, a periodical published by the American Bar Association.

Gilbert, Scott (2019), "Methodological Consideration for Proper Life Care Plan Valuation: The Role of Medical Price Inflation Forecasts," *The Earnings Analyst* 16, 29-42.

Gilbert, Scott (2020), *Business Liability and Economic Damages*, 2nd edition, Business Expert Press.

Heckman, James J., Lance J. Lochner, and Petra E. Todd (2006), "Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond," Chapter 7 of *The Handbook of the Economics of Education*, edited by Eric A. Hanushek and Finis Welch.

Horner, Stephen M. and Frank Slesnick (1999), "The Valuation of Earnings Capacity: Definition, Measurement, and Evidence," *Journal of Forensic Economics* 12(1), pages 13-42.

Horner, Stephen M. and Frank Slesnick (2017), "The Meaning of Earning Capacity," Chapter 2 of *Forensic Economics*, edited by Frank Tinari, published by Palgrave Macmillan.

Ireland, Thomas and Frank L. Slesnick (2020), "Understanding a Vocational Economics, Inc., Calculation of Lost Earning Capacity in a Personal Injury Case with Residual Earning Capacity," *The Rehabilitation Professional* 28(3), 141-150.

Rosenberg, Joseph Irving (2010), "Discounting Damage Awards using the Zero Coupon Treasury Curve: Satisfying Legal and Economic Theory While Matching Future Cash Flow Projections," *Journal of Forensic Economics* 21(2), pp. 173-194.

Gilbert Economics

Weisman et al. v. BJC Healthcare et al.



Skoog, Gary, James Ciecka, and Kurt Krueger (2019), "The Markov Model of Labor Force Activity 2012-2017: Extended Tables on Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors," *Journal of Forensic Economics* 28 (1), 15-108.

Smith, Shirley J. (1982), New worklife estimates reflect changing profile of labor force," *Monthly Labor Review*, March 1982, pages 1-20.

Smith, Shirley J, (1986), "Worklife estimates: effects of race and education," *BLS Bulletin* 2254. U.S. Department of Labor, Washington, D.C.

Weiss, Yoram (1986), "The determination of life cycle earnings: A survey," Chapter 11 of *Handbook of Labor Economics*, Volume 1, 1986, Pages 603-640.



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Peer-Reviewed Research Articles

"Testing for the Onset of Trend, Using Wavelets," Journal of Time Series Analysis 20, 513-526, September 1999.

"Testing the Distribution of Error Components in Panel Data Models," Economics Letters 77, 47-53, 2002.

"Distribution of Rankings for Groups Exhibiting Heteroskedasticity and Correlation," Journal of the American Statistical Association. 98, 147157, 2003.

"Testing for Latent Factors in Models with Autocorrelation and Heteroskedasticity of Unknown Form" with Petr Zemcik, Southern Economic Journal 72, 236-252, 2005.

"The Impact of Skewness in the Hedging Decision," with Kyle Jones and Gay Hatfield, Journal of Futures Markets 26, 503-520, 2006.

"Who's Afraid of Reduced-Rank Parameterizations of Multivariate Models? Theory and Example," with Petr Zemcik, *Journal of Multivariate Analysis* 97, 925-945, 2006.

"The Value of Future Income in Perfect Foresight Equilibrium," *Journal of Forensic Economics*, 21-42, 2011.

"The Effect of Assassinations on Political Institutions: are the Jones-Olken Findings Robust?," with Kevin Sylwester and Wei Gao, *Journal of Applied Economics Letters* 20(7), pp. 673-676, 2013.

"Taxes and the present value assessment of economic losses in personal injury litigation: Comment," *Journal of Legal Economics* 19(2): pp. 27-42, 2013.

"A Theory of Tax Effects on Economic Damages," *Journal of Legal Economics* 20, pages 1-13, year 2014.

"Effects of college education on demonstrated happiness in the United States," with Pavlo Buryi, *Applied Economics Letters*, year 2014.

"Evidence from Structural and Factor-Augmented VAR Analyses," with MD Rafayet Alam, *Agricultural Economics* 48, 1, 15-27. "Banks, Development, and Tax," with Bojan Ilievski, *Quarterly Review of Economics and Finance*. 61c, 1-13.

"Relative Importance of Real and Nominal shocks to U.S. Economy and Exchange Rates," with MD Rafayet Alam, *Journal of developing Areas*, 53(4), 129-138.

"Digital Currency Risk," with Hio Loi, *International Journal of Economics and Finance*, Volume 10(2), 108-123. Year 2018.

"Testing for Freak Jumps in Exchange Rates," with Hio Loi, *Academy of Economics and Finance Journal* 10: 25-34. Year 2019.

"Methodological Consideration for Proper Life Care Plan Valuation: The Role of Medical Price Inflation Forecasts," *The Earnings Analyst* 16, 29-42. Year 2019.

"The Role of Research and Development in Shaping Agricultural Labor and Land Productivity in Colombia: 1981-2016", with Juan Taramuel, Wanki Moon, and C. Matthew Rendleman, *Agribusiness* 39(1), 65-84. Year 2022.

Other Articles

"Economic Controversy in Personal Injury Cases," *Journal of the Missouri Bar Association*, January/February 2012.

Response to comment on the above-listed article "Economic Controversy ... ", appears as a letter in the *Journal of the Missouri Bar Association*, November/ December 2013.

"Dueling Economists in Personal Injury and Wrongful Death Litigation," *Illinois Law Journal* May 2014).

"Worklife and Economic Damages," in *The Brief* (Summer 2014, American Bar Association).

“Review of Pricing Lives: Guideposts to a Safer Society,” Journal of Legal Economics 25(1-2), 91-99, September 2019.

Books and Chapters in Books

“Shifts in the Stock Market Over Time”, in Papers and Proceedings of the Academy of Economics and Finance, 1997.

“Foreign Aid, History, and Growth,” with Kevin Sylwester, in Theory and Practice of Foreign Aid, edited by Sajal Lahiri, (Emerald Publishing, 2007) .

Business Liability and Economic Damages (2016, Business Expert Press).

Multi-Market Antitrust Economics, (2017, Palgrave-Macmillan).

Business Liability and Economic Damages, 2nd Edition (2020, Business Expert Press).

Presentations at Professional Meetings

“Shifts in the Stock Market Over Time”, presented at the 1997 meeting of the Academy of Economics and Finance (Lafayette, Louisiana).

“Constrained Fixed Effects Models for Panel Data with Few Time Observations”, presented at the 69th annual conference of the Southern Economic Association, November 1999 (New Orleans, Louisiana).

“Reliability of Statistical Ranking via Sample Moments”, presented at the 10th annual meeting of the Midwest Econometrics Group, at University of Chicago, October 2000.

“Robust Tests for Reduced Rank in Dynamic Regression Systems”, with Petr Zemcik, presented at the 2001 meetings of the Midwest Economic Association (Cleveland, Ohio).

“Sampling Schemes and Hypothesis Tests in Regression Models”, presented at the Summer 2001 meetings of the Econometric Society (College Park, Maryland).

“Sampling Schemes and Hypothesis Tests in Regression Models”, presented at the Fall 2001 meetings of the Midwest Econometrics Group (Kansas City, Missouri).

“Distribution of Rankings for Groups Exhibiting Heteroskedasticity and Correlation”, presented at the Fall 2002 meetings of the Midwest Econometrics Group (Columbus, Ohio). “Distribution of Rankings for Groups Exhibiting Heteroskedasticity and Correlation”, presented at the Winter 2003 meetings of the Econometric Society (Washington, DC).

"Statistical Inference and the Optimism Principle", presented at the University of Mississippi Economics and Finance Department, October 2003, and at the Fall 2003 meetings of the Midwest Econometrics Group, Columbia Missouri.

"A Generalized Theory of Mean Value, with Application to Choice Under Uncertainty and Econometrics", presented at the Midwest Economics Association, Chicago, April 2004.

"Who's Afraid of Reduced Rank Parameterization of Multivariate Models? Theory and Example", Midwest Economic Association Meetings, Milwaukee, March, 2005.

"When Do Betas Really Differ", Midwest Economic Association Meetings, Milwaukee, March, 2005 (with Petr Zemcik).

"Who's Afraid of Reduced-Rank Parameterizations of Multivariate Linear Models: Theory and Example," Midwest Econometric Group meeting, Carbondale Illinois, October 2005.

"Probability and Economic Expectations: Challenges from an Experiment", presented at the CERGE-EI graduate school of economics, Prague (Czech Republic), November 2006.

"Probability and Economic Expectations: Challenges from an Experiment", presented at the Central European University graduate school of economics, Budapest (Hungary), December 2006.

"Measuring the Opportunity Cost of Portfolio Choices", presented at the SIUC Economics Department's Vandever Lecture Series, March 2007.

"Measuring Goodness of Fit in Fama-French Models of Asset Returns", presented at the Midwest Econometric Group meetings, St. Louis University, St. Louis Missouri, October 2007.

"Is Economic Fluctuation a Really Long Night at the Casino?", presented at the SIUC Economics Department's Vandever Lecture Series, November 2007.

"Sizing Up Errors in Models of Risk", presented at the Fall 2008 meetings of the Midwest Econometric Group.

"Portfolio Mispricing and the Cross Section of Asset Returns" Missouri Economics Conference, Spring 2009.

"Econometrics of Portfolio tilting", presented at the Fall 2009 meetings of the Midwest Econometric Group.

"Picking a Present Value Estimate of Future Earnings: The Role of Simulation," presented in the Brown-Bag Workshop seminar series, SIUC Economics Department, December 2009.

"Active Learning in Economics via Real World Investigations," presented at the Winter 2010 meetings of the American Economics Association, in a poster session dedicated to Active Learning in Economics.

"The Value of Future Earnings in Perfect Foresight Equilibrium," presented at the annual 2010 meetings of the Illinois Economic Association, in October 2010 at Chicago Illinois, the January 2011 meeting of the

National Association of Forensic Economics (Denver) and the spring 2011 meeting of the Midwest Economic Association.

“Econometrics of Income Lost to Injury or Death” presented at the Winter 2012 meetings of the National Association of Forensic Economics, Chicago Illinois.

“Tax and Income Lost to Injury and Death” presented at the 2012 meeting of the American Academy of Economic and Financial Experts, Las Vegas Nevada.

“A Theory of Tax Effects on Economic Damages” presented at the 2013 meeting of the National Association of Forensic Economics, San Diego California.

“Economic Foundation of Damages in Personal Injury and Wrongful Death Law” presented at the 2014 meeting of the National Association of Forensic Economics, Philadelphia Pennsylvania.

“Discount Rates” presented at the 2014 meeting of the American Academy of Economic and Financial Experts (AAEFE), Las Vegas Nevada.

“Improving Quantile Regression via Implied Parameter Restrictions” presented at the Economics Department of Southern Illinois University Carbondale, September 2014.

“Labor Earnings Risk and Economic Damages” presented at the 2014 meeting of the Missouri Valley Economic Association, St. Louis Missouri.

“Labor Earnings Risk and Economic Damages” presented at the 2015 national meeting of the National Association of Forensic Economics, Boston, Massachusetts.

“Estimation Risk and Economic Damages” presented at the 2016 national meeting of the National Association of Forensic Economics, San Francisco, California.

“Economic Damages Arising from a Wrongfully Harmed Credit Rating,” presented at the 2016 national meeting of the American Association of Economic and Financial Experts, Las Vegas, Nevada.

“Estimation Risk in Determining the Present Value of Life Care Plans,” presented at the NAFE Western Regional Conference, WEAI, Portland Oregon, July 2016.

“Estimation Risk in Determining Economic Damages Associated with Life Care Plans,” presented at the ASSA NAFE meetings, Chicago, January 2017.

“Ethics in Economic Consulting,” presented at the first annual AIRLEAP conference: An Urgency for Evidence and Transparency in Economic Analysis and Policy, St. Charles Missouri, October 2017.

“Discounting Future Losses via Bond Market Shopping,” AAEFE annual meeting, Las Vegas 2018.

“Worklife and Earning Capacity,” presented at the NAFE Western Regional Conference, WEAI, Portland Oregon, June 2018.

"The Ethics of Consequential Economic Prediction-Making, With Policy Applications," presented at the Public and Private Ethics in Economics: Leadership and Transparency in Economic Analysis and Policy meetings, sponsored by AIRLEAP, St. Charles Missouri, October 2018.

"Forecasting Asset Prices in the Long Term," presented at an SIUC Department of Finance Brown Bag Seminar and an SIUC Department of Economics Vandever Lecture, year 2018.

"An Econometric Model of Worklife Expectancy and Normative Retirement," presented at the ASSA NAFE meetings, Atlanta, January 2019.

"Econometric Tests for Price Fixing in Antitrust Collusion Cases," AAEFE annual meeting, Las Vegas 2019.

"Forecasting Medical Price Inflation," Collegium of Pecuniary Damage Experts (CPDE) annual meeting, Las Vegas 2019.

"Testing for Price-Fixing Effects: A Difference-in-Difference Approach," presented at the ASSA NAFE meetings, San Diego 2020.

"Life Care Plan Valuation: The Role of Medical Price Inflation," 2020 IARP Virtual Conference & IALCP Virtual Symposium, International Association of Rehabilitation Professionals.

"Forecasting Medical Care Prices," AREA 2021 Virtual Annual Conference, May 2021, American Rehabilitation Economics Association.

"How Good is My Degree? Economic Damages from False Claims by Colleges," Western Economic Association International, Virtual 96th Annual Conference, June 2021.

"Stationarity and Forecasts of Real Medical Price Inflation," National Association of Forensic Economics, Annual meeting (online), January 2022.

"How Good is My Degree? Economic Damages from False Claims by Colleges," Collegium of Pecuniary Damage Experts, Annual Conference, April 2022.

Other Conferences Attended

64th Annual Antitrust Law Spring Meeting, ABA Section of Antitrust Law, Spring 2015.

2017 Hal White Antitrust Conference, Bates-White, Washington DC, June 2017.

Tenth Annual Searle Center Conference on Antitrust Economics and Competition Policy, Northwestern University, September 2017.

George Mason Law Review 21st Annual Antitrust Symposium, February 2018.

Antitrust in Health Care, American Bar Association, Arlington, Virginia, May 2018.

Forum on International Antitrust Issues, Northwestern University, Chicago Illinois, June 2018.

Eleventh Annual Searle Center Conference on Antitrust Economics and Competition Policy, Northwestern University, September 2018.

Twelfth Annual Searle Center Conference on Antitrust Economics and Competition Policy, Northwestern University, September 2019.

Annual meetings of the Collegium of Pecuniary Damages Experts, years 2016-2018.

68th Antitrust (Virtual) Spring Meeting, Antitrust Law Section of the American Bar Association, April 17 – May 1, 2020.

Econometric Society/Bocconi University World Congress, August 2020.

57th Annual Missouri Valley Economics Conference, joint with the Midwestern Meeting of the National Association of Forensic Economics, online, October 2020.

Antitrust Law Section Networking Reception, online, October 20, 2020.

Antitrust TX 2020, Virtual Conference, online, October 27-28, 2020.

Allied Social Sciences Association, online, January 3-4, 2021. Chair and Discussant for NAFE Session: Special Topics: Renewable Energy, Pandemics & Blood Lead Levels.

69th Antitrust (Virtual) Spring Meeting, Antitrust Law Section of the American Bar Association, March 23-26, 2021.

American Bar Association Panel Discussion, “More Monopsony, More Problems?,” online 1-27-2022.

Grants Received

At Southern Illinois University Carbondale:

“Economic Impact of Illinois Film Tax Credits,” external grant from the Illinois Department of Commerce and Economic Opportunity, years 2019 and 2020.

“Sources of Fluctuation in Real Exchange Rates”, internal faculty seed grant, with Mahbub Morshed, 25% research assistant funded for 8/09-5/10.

“Supplemental Instruction Leader for Economics Principles Courses”, funding provided for two SI Leaders for Fall 2007 and Spring 2008.

“Human Development Indicators,” with Sajal Lahiri, research assistant funded for 1/03-5/03.

“Methods for Panel Data Analysis With Few Time Observations”, funded for the period 4/99-3/2001, in the amount \$60,000, by the Office of Naval Research. Half of this grant activity (\$30,000) was carried out during the period 6/2000-5/2001, after joining SIUC.

At University of Mississippi:

“Cohort Effects in Panel Data”, funded for the period 5/98-8/98, in the amount \$10,000, by the Hearin Foundation

“Forecasting an Economy with Structural Breaks”, funded for the period 5/98-8/98, in the amount \$3,000, by the Graduate School of the University of Mississippi

“Co-movement Between Economic Variables at Short and Long Horizons”, funded for the period 5/97-8/97, in the amount of \$6,000, by the Graduate School of the University of Mississippi.

Honors and Awards

Faculty Teaching Award, year 2005, Economics Department, Southern Illinois University Carbondale.

Graduate Assistantship, years 1990-1994, University of California San Diego.

Honors program, Bachelors in Economics degree, University of California Berkeley, 1987.

Editorial Work

Associate Editor, The American Statistician, 2005-present.

Associate Editor, The African Finance Journal, 2010-present.

Associate Editor, Journal of Legal Economics, October 2020 – present.

Referee for numerous academic journals, during the period 1996-present, including:

The Journal of the American Statistical Association

The Journal of Money, Credit, and Banking

The Journal of Business and Economic Statistics

The Southern Economic Journal

The Journal of Statistical Planning and Inference

The African Finance Journal

The Journal of Statistical Planning and Control

Econometric Reviews

Journal of Legal Economics

Journal of Forensic Economics

Journal of Investment Strategies

Journal of Business Valuation and Economic Loss Analysis

Economics Bulletin

Memberships

African Finance and Economic Association

American Economic Association

Econometric Society

American Statistical Association

American Bar Association

National Association of Forensic Economics

American Academy of Economics and Financial Experts

Collegium of Pecuniary Damage Experts

Graduate Student Economic Research Supervised

Master's Students

Floris F. Fleermuys, Benoit M. Kudinga, Bamidele O. Adesida, Linlin Liu, Sergiy Polyachenko, Srikanth Uppalaunchi, Babatunde Aiyemo, Qaiss Khan Alokozai, Sean T. Neighbors, Hamood S. Al Shoaibi, Andrew M. Croessman, Diana M. Donnelly, Morgan O. Stewart, Jeanette F. Weber, Jerome Howard, Daniel VanOverbeke, Militha Komireddy, Dylan Sellers, Wilder Pimentel, Hongnai Zhang, Bailey Durkin

Ph.D. Students

Ahmed Abou-Zaid, Sofyan Azaizeh, Fassil Fanta, Hasan Mohsin, Wei Gao, Bojan Ilievski, Joseph Sobieralski, Xibin Zhang, Shaila Parveen, Gerard Tano, Md. Rafayet Alam, Hio Loi, Nana Quaicoe



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Testimony List, Scott Gilbert, Ph.D.

1. Court: Circuit Court of the Eleventh Judicial Circuit, Livingston County, IL
Case Number: 2020 L 25
Case Name: Brian Smith, as Independent Administrator of the Estate of Joshua Gambrel, Deceased v. Nicholas Stephens & Stoller International, Inc., d/b/a Precision Farming Technologies, and Auto Owners Insurance
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
2. Court: Circuit Court of St. Louis County, Missouri
Case Number: 1822-CC11700
Case Name: Ryan Shannon v. SumnerOne, Inc.
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
3. Court: Circuit Court of St. Louis County, Missouri
Case Number: 20SL-CC00648
Case Name: Brian Heine v. Daniel R. Pastorius, William Duffie, and TPS Parking Management LLC d/b/a The Parking Spot 3
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
4. Court: U.S. District Court, Western District of Missouri
Case Number: 4:14-cv-00676-FJG
Case Name: Micah B. Riggs v. Robert Gibbs et al.
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition and trial
5. Court: Third Judicial Circuit, Madison County, Illinois
Case Number: 20-L-1448
Case Name: DiMarco (Kristi and Chris) v. Forrest K. Lerch, et al.
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition

6. Court: U.S. District Court, Central District of Illinois, Rock Island Division
Case Number: 4:20-cv-04146-SLD-JEH
Case Name: Moore (Sterling and Bridget) v. Deanna Welch, Inland Bee, Inc. d/b/a/ Bennett Trucking
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
7. Court: Circuit Court of Cook County, Law Division, Illinois
Case Number: 18 L 8347
Case Name: Martha Weiland, for the Estate of Ronald Weiland, v. The Boeing Company
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
8. Court: Judicial Arbitration and Mediation Services, Chicago
Case Number: 1340018386
Case Name: Syrena Tucker v. DeVry Education Group Inc., et al.
For claimant or respondent counsel: claimant
Testimony Type: arbitration
9. Court: Judicial Arbitration and Mediation Services, Chicago
Case Number: 1340018384
Case Name: Teresita Perez v. DeVry Education Group Inc., et al.
For claimant or respondent counsel: claimant
Testimony Type: arbitration
10. Court: Cook County, Illinois
Case Number: 15CH12890
Case Name: Maretta Benjamin v. Michael Blumenthal
For plaintiff or defense counsel: defendant
Testimony Type: deposition
11. Court: Judicial Arbitration and Mediation Services, Chicago
Case Number: 1340016074
Case Name: Tammy Hrinda v. DeVry Education Group Inc., et al.
For claimant or respondent counsel: claimant
Testimony Type: arbitration
12. Court: Judicial Arbitration and Mediation Services, Chicago
Case Number: 1340017973
Case Name: Alex Osborne v. DeVry Education Group Inc., et al.
For claimant or respondent counsel: claimant

Testimony Type: arbitration

13. Court: Judicial Arbitration and Mediation Services, Chicago
Case Number: 1340017980
Case Name: Jesse Jacobs v. DeVry Education Group Inc., et al.
For claimant or respondent counsel: claimant
Testimony Type: arbitration
14. Court: Judicial Arbitration and Mediation Services, Chicago
Case Number: 1340016020
Case Name: Michael Forsythe v. DeVry Education Group Inc., et al.
For claimant or respondent counsel: claimant
Testimony Type: arbitration
15. Court: Judicial Arbitration and Mediation Services, Chicago
Case Number: 1340017974
Case Name: Gwendolyn Haynes v. DeVry Education Group Inc., et al.
For claimant or respondent counsel: claimant
Testimony Type: deposition, arbitration
16. Court: Illinois State Court, Kane County
Case Number: 14 L 543
Case Name: Corey Battles v. Steven Wood et al.
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
17. Court: Circuit Court of the City of St. Louis, Missouri
Case Number: 1722-CC11963
Case Name: Mark Potratz and Anthony Russo v. St. Louis Community College
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
18. Court: United States District Court, Western District of Missouri, Central Division
Case Number: 2:19-cv-04116-BCW
Case Name: Heather Petershagen v. Wal-Mart Stores Inc. and Eric Cawdron
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition
19. Court: United States District Court for the Eastern District of Missouri
Case Number: 2016-L-008337
Case Name: Richard Barcomb v. General Motors LLC
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition

20. Court: Cook County, IL
Case Number: 2016-L-008337
Case Name: Konstantine Ress v. Campagna-Turano Bakery Inc., d/b/a Turano Baking Company
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition

21. Court: United States District Court, Western District of Missouri (Kansas City)
Case Number: 16CV00381
Case Name: K.C.W., a Minor v. United States of America Department of Veteran Affairs
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition

22. Court: Cook County, IL
Case Number: 15 L 8876
Case Name: Angelica Gonzalez, as Independent Administrator of the Estate of Manuel Gonzalez, v. BNSF Railway Company
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition

23. Court: U.S. District Court, Western District of Missouri, Western Division
Case Number: 17-00710-CV-W-GAF
Case Name: A.G. b/n/f Wilson vs. Great Circle, Inc., et al.
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition

24. Court: St. Clair County, IL
Case Number: 15-L-707
Case Name: Heather Morgan, As Special Administrator of the Estate of Joshua Morgan v. MTS Development Group, LLC, & The City of Mascoutah, Illinois
For plaintiff or defense counsel: plaintiff
Testimony Type: deposition